

REPTILES AND MAMMALS OF FITZROY ISLAND, QUEENSLAND

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The terrestrial fauna of Fitzroy Island National Park has not hitherto been the focus of a biodiversity survey. During 1999, 2000 and 2003 an extensive faunal survey was conducted, increasing the number of confirmed taxa from one to eighteen reptiles and from one to four mammals. The herpetofaunal and mammalian composition of the island is now known to include three gekkonids, one varanid, ten scincids, one python, two colubrids, two bats, a macropod and a rat. Despite extensive searches, no amphibians were found. □ *Reptiles, mammals, island biogeography, biodiversity, Fitzroy Island.*

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Fitzroy Island is one of the largest continental islands along Australia's eastern coast. Located 29km SE of Cairns, Fitzroy Island is separated from the nearest mainland, Cape Grafton peninsula, by a 5km wide channel. Though the island is a national park within the Great Barrier Reef, it has not hitherto been the subject of a biodiversity survey. Because of the island's size, distance from the mainland and geological history, it has remained a comparatively pristine environment, spared serious invasive species such as cane toads. As the end of a long mountain chain, Fitzroy has three peaks in excess of 180m, giving it a considerable terrestrial surface area. These features make Fitzroy Island an attractive laboratory for studies on continental biogeography that would complement the considerable volume of studies of oceanic island systems.

In 1999 the senior author began a survey of the terrestrial fauna of Fitzroy Island, focusing primarily on the reptiles, but including insects, centipedes and mammals. Published information on Fitzroy Island's fauna includes Malone (2001) and Sprackland (2000, 2001a, 2001b, 2001c). This paper presents the herpetofaunal content of the island (Table 1). A detailed description of the vegetation communities is provided in Le Cussan (1997).

MATERIALS AND METHODS

Animals were observed *in situ* during October 1999, August 2000 and June-August and photographed. Identifications were made on site using Cogger (1999), Couper et al. (2000) and Swan (1995).

THE ISLAND ENVIRONMENT

Fitzroy Island is part of a granitic mountain chain that runs in a predominantly N-S direction along coastal Queensland. At the end of the last Ice Age some 6,000BP, the low-lying grassy plain between Fitzroy's 4 peaks and what is now the mainland was flooded by sea. Remaining above the waterline is Little Fitzroy Island at the far east of the chain and the 3 contiguous peaks of larger Fitzroy Island. The main island peaks reach 189, 211 and 269m in height. The larger island is some 339ha in area with maximum length of 3,750m and width of 2,000m. The island is a national park, but small portions of the northern coast house a commercial prawn hatchery and a resort. Queensland Parks and Wildlife Service has a ranger base of several buildings on the easternmost peak (129m) and a concrete access road from the resort to the base. QPWS also has several walking paths around the park, though the majority of the island is inaccessible due to vegetation. A fringing reef surrounds both islands.

The north-facing slopes of the island are lush wet rainforest. Higher elevations and south-facing slopes are drier scrub forest with intermittent open heath (mainly on hillsides) and the east is composed of pandanus palms, mangroves and casuarinas. Annual average temperatures are 28°C (day) and 22.5°C (night).

REPTILES OBSERVED

GEKKONIDAE.

Gehyra dubia (Macleay, 1877). Common around the buildings of the ranger base (elevation 129m)

and the large VIP buildings W of the resort (elevation 10m). Differs very slightly from mainland specimens in the broad rostral having a partial median cleft, nearly dividing the scale in two. Toes with round tips. Subdigital lamellae strongly notched into 2 rows; first lamella of fourth toe triangular, second and third strongly V-shaped, fourth through eighth strongly notched and ninth straight. First digit tiny and clawless. Mental pentagonal; 6 large postmentals, the first in contact with mental and first infralabial. Dorsals granular, subequal. Tail carrot shaped, slightly depressed. Colour variable, from nearly translucent pink to gray with darker symmetrical spots on either side of the vertebral column. Adult SVL 63-68mm; tail 60-63mm.

Egg laying and hatching occurred in June and July. Males have enlarged postanal sacs. Active from dusk until dawn and often seen hunting along trails on the ground, even on rainy evenings. Found near the colonies of *Hemidactylus* only at the westernmost buildings of the resort, 285m from the closest observed *Hemidactylus*, but the 2 species have never been seen in association.

Hemidactylus frenatus Duméril & Bibron, 1836. A common waif species found throughout much of the tropical and subtropical world. On Fitzroy Island this species is found among the resort's buildings and adjacent areas at lower elevations and the forest up to about 150m elevations. They are active on walls and ceilings of buildings and hunt on the ground further afield. Geckos crossing the road on rainy evenings, though rarely seen, resemble frogs, making short quick hopping movements. The senior author first noticed this behaviour when he stopped his vehicle to photograph what he believed was his first record for an amphibian on the island. This hopping behaviour, apparently not recorded elsewhere, was consistent when geckos were observed on rainy nights, but not seen when the lizards were not actually in the rain. They are entirely absent from the ranger base and lighthouse area. Toes elongated, oval, with 4 pairs of distinctly divided subdigital lamellae under the fourth toe. First digit tiny, with a feeble claw. Rostral large, broader than high. Dorsals granular, intermixed with small conical scales. Unbroken tail slightly depressed, with protruding soft spines that form annulations. Colour grayish to pink above, with marbled pattern of faint darker dorsolateral stripes in which are lighter spots. SVL 49-51mm; tail 62-65mm.

Apparently parthenogenic, only egg-bearing females observed. Egg laying and hatching

occurring in June and July. Active from dusk until midnight and may be seen hunting along the road to the ranger's base up to an elevation of about 80m. Unlike *Gehyra* this species is generally not active on rainy evenings. If already active, the geckos immediately seek cover when rain starts. On cooler or overcast days these geckos will take advantage of midday sun to bask on tree trunks. When so basking they are more wary and do not allow an observer to approach as closely as at night. This species and *Gehyra* are active at much lower temperatures than the other island reptiles, observed at a low of 17°C.

Nactus cheverti (Boulenger, 1885). This is a padless, primarily ground-dwelling gecko with an elongated body and tail, pebbled skin and extremely thin, clawed digits. Found widely on the island in most localities and elevations except in shrub heath, under debris, rocks and fallen logs. May climb on shrubs and bases of trees, but primarily a ground dweller. Body dark brown with scattered tiny white specks. Coloration varies with exposure to light or temperature and may be light brown in the evening. The head may be pale yellow if the lizard is exposed during the day (Couper et al., 2000; Sprackland, 2000, 2001a, 2001b). Unbroken tail longer than SVL. SVL 41-50mm; tail 58-63mm. Once included as *Nactus pelagicus* but revised by Zug (1997).

Egg laying is in late July-August. Active at night among plants and debris, but rarely in the open. If crossing a path they make a sudden dash to cover the open distance and then hide in the foliage. Most common in late June-early August.

SCINCIDAE.

Carlia laevis (Oudemans, 1894). This species was the only reptile recorded for Fitzroy Island in print prior to 1999 (Macleay, 1878). The lizard is widespread in all areas that provide leaf litter, but because the lizards tend to forage under the leaves they are seldom seen. On Fitzroy Island, the heads of both sexes and all age groups are generally reddish brown, contrasting with the dull gray-brown body. Males have bright reddish tails. Body generally a flat brown, not shiny and without markings. SVL 35-39mm.

Diurnal, found in leaf litter in dappled sunlight. Moves in short bursts. Pairs and trios often seen foraging together. Males are territorial and aggressively chase other males away, but tolerate females and juveniles. Often found in association with *Carlia longipes*. The foraging *Carlia* may climb over and even bask upon a *Carlia* without eliciting a response from the larger skink. Feeds

on small insects including black ants, small beetles and bees. Skinks may take position outside a bee or ant nest and feed upon insects as they emerge. Also seen to attack tiny bits of dry leaves dangling and moving in the wind. Distinguished from *Saproscincus* in having reddish head and brown body. Though sympatric with the higher elevation *Saproscincus*, the microhabitat usage is distinct: the latter forages through grasses and over logs, while *Carlia* never moves away from leaf litter. Not found above about 140m.

Carlia longipes (Macleay, 1877). Extremely common and widespread, characterized by its tetradactyl front limbs, white-flecked black shoulder markings and reddish brown to bright red flanks. Observed at all localities and elevations on the island. Dorsal scales smooth and shiny. Body brown or bronze dorsally, with or without very tiny white speckling. Black mark, with tiny white flecks, extends from behind ear to shoulder. Red marking meets black flash and extends to mid body or groin; much more pronounced during breeding season. SVL 55-65mm.

Mating takes place in September-October and young emerge in May-June. Active all day once temperatures exceed 21°C; not found when wind is strong. They run across open spaces in 3-4m spurts, after each of which they often wriggle the tail and then dash again. This species is often found in association with *Carlia laevis* and may be oblivious to the smaller lizards. On several occasions the senior author has witnessed *Carlia* closely approach and even climb upon *Carlia* without any response from the latter.

QPWS (2001) recorded *Carlia storri* on the island, but our surveys did not.

Cryptoblepharus litoralis (Mertens, 1958). Small, flattened, with round, lidless eyes. Similar to *Cryptoblepharus virgatus* from which it differs in having a pale yellowish (vs. orange) head, no black dorsolateral stripes and slightly larger SVL (50-55mm vs 36-42mm).

A large colony lives among the large rounded boulders adjacent to Nudey Beach, where they occupy positions near the splash line with the sea. They forage along rocks and the beach, but rarely enter the water. They are sympatric with both *C. virgatus* and the larger *Eulamprus brachysoma*, but each species stays in exclusive abutting territories: *Eulamprus* on higher rocks, *C. virgatus* on rocks near the tree line and away from the water.

Cryptoblepharus virgatus (Garman, 1901). Lacking movable eyelids, it is widely distributed but highly secretive. The body is strongly depressed, with a pointed head. Limbs large and overlap when adpressed. Dorsum dark brown with two cream-coloured dorsolateral stripes from eyes to hips. Tail with characteristic zigzag pattern from hips to about halfway down its length.

An extremely wary species found across the island at all elevations in winter, but restricted to cooler locations in the rainforest during summer. Found mainly on boulders and tree limbs, basking in bright sun. They will climb tall trees in search of insect prey. The extremely thin body casts almost no shadow even in very bright sunlight, helping the lizard remain inconspicuous on exposed boulder surfaces. SVL 38-40mm; tail 50-55mm. Young appear in July and early August.

Egernia frerei Günther, 1897. Fitzroy Island's second largest lizard, the major skink is found primarily around the resort and along boulders on the walking paths on the western half of the island. Not yet observed on the ranger's road or the eastern portion of the island, or at elevations above 180m. A large (SVL 180-195mm), robust, smooth-scaled lizard with strong but widely separated limbs. It is more often heard than seen as it dashes through leaf litter to find shelter. Body light brown with faint darker dorsolateral stripes extending from the ear along the length of the tail. Ventrally cream, but some individuals have yellow.

Mating occurs in October-November, at which time the lizards lose much of their shyness of people, allowing closer approach than at other times. Active on warm days once temperature exceeds 24°C. Often found inside guest rooms at the resort.

Eulamprus brachysoma (Lönnberg & Andersson, 1915). Also widespread across the entire island, this black and gold marbled skink is also found in a variety of habitats, from rainforest, beach edges, heath and open areas around the ranger's base. Until recently, *E. brachysoma* was considered a subspecies of *E. tenuis*. Body elongate, with acute head. Scales smooth and shiny. Dorsal colouring black mottled with gold and lips conspicuously barred with pale gray and white. Tail longer than SVL, cylindrical. SVL 67-82mm; tail 84-90mm.

This is a viviparous skink and juveniles appear in June and July. This is a very alert species quick to take shelter if approached. They are terrestrial, seen around boulders, fallen trees, in rocks, in gardens, on stairs and tree trunks, but also

regularly enter buildings, where they may take residence within walls and under furniture. The largest observed colony, numbering 31 specimens ranging from subadults to adults, lives among the huge boulders on the farthest northwestern tip of the island, at the northern limit of Nudey Beach. Individual lizards were identifiable by a combination of a) size class (juvenile, subadult, adult), b) features of scale damage (most had scars or missing scales that were distinct), c) condition of tail (few had fully intact, original tails) and d) sex (based on lateral colour). At high tide there are two crevices that fill with seawater and in which the skinks swim and forage for food, capturing insects that have fallen into the water.

Glaphyromorphus crassicaudus (Duméril & Bibron, 1851). The QPWS have documented *Glaphyromorphus cracens* from the island, but our surveys failed to observe this species. We include it because a voucher specimen has been obtained. The specimen was reclassified when registered in the Queensland Museum collection as *G. crassicaudus* (Patrick Couper, pers. comm.).

Glaphyromorphus fuscicaudis (Greer, 1979). A single specimen was observed at the eastern edge of the campground, adjacent to the prawn hatchery, on 22 June 2003. Body cylindrical, robust, extremely smooth and shiny. Parietals long, in contact posteriorly. A single loreal. Lower eyelid moveable, opaque. Nasals undivided, supranasals absent. Two large prefrontals, barely in contact. Six supralabials, the fourth and fifth in contact with the eye. Five infralabials. Postmental in contact with first and second infralabials. Lower jaw countersunken compared to upper jaw. Four supraoculars. No ear lobules. Ear almost as large as eye, round. Addressed limbs do not meet, separated by less than the length of the front limb. Pentadactyl, with 18 lamellae under fourth toe. Lower limbs pale pink. Dark brown above, with immaculate head. No dark lateral stripe. Neck and flanks brown with small darker brown flecks. Head chocolate reddish-brown. Ventrally cream, pinkish under tail. The tail was lost and being regenerated. SVL 85mm; right rear leg 25mm.

Glaphyromorphus nigricaudis (Greer, 1979). A single specimen of this area endemic was collected in the living room of the ranger's house on the evening of 23 June 2003. Similar to previous species except as follows: Ear opening oval. Snout not as attenuated or depressed. Head brown above, with no trace of reddish. Seven supralabials, fifth and sixth in contact with the eye. Postmentals contact first and second

infralabials. Prefrontals in broad contact. Postfrontal not in contact with first preocular. Addressed limbs meet. Golden brown dorsally with scattered light spots. Neck and sides with irregular, broken black band that extends to groin. Lips light with pale gray bars. Limbs brown with darker reticulation. Belly pale yellow. Sixty scales from parietal to hip. SVL 80mm. Right rear leg 19mm.

Saproscincus basiliscus (Ingram & Rawlinson, 1981). Another small skink with very similar habits to *Carlia laevis*, but almost always solitary when active. Found primarily in open grassy areas near the ranger's base and in heath above 100m elevation, but differs from *Carlia* in avoiding leaf litter and in being far less common. Body shiny, with comparatively large scales (larger than in *Carlia*), a gray-blue sheen and rounded (vs pointed) snout as seen in profile. SVL 36-40mm.

An active forager that is most likely to be seen in the lawn grass around the ranger base, where it will climb felled trees and low concrete structures to bask. Sympatric with *Carlia* around the ranger base, but persists to the eastern slope of the summit (269m).

VARANIDAE.

Varanus panoptes Storr, 1980. The Argus monitor, growing to SVL 660mm, is the largest lizard on the island and one of the top predators. A large group is present on Little Fitzroy Island and specimens have been observed on Fitzroy near the resort, along the road to the ranger base (in scrub, not rainforest sites) and at the ranger base, all north-facing localities. Monitors are basking in the early morning and late afternoon, at which times they are most likely to be observed. By day they forage widely. Pattern variable, ranging from dark brown with large pale spots to dark brown with tiny spots. The tail is patterned like the dorsum and is conspicuously compressed laterally.

Like other monitors, this is a heat-loving animal that is not seen if temperatures are below 30°C. It is also going to remain concealed if winds exceed 5 knots.

PYTHONIDAE.

Morelia spilota (Lacépède, 1804). Carpet pythons are common, with numerous sightings being recorded. Our survey found shed skin and a skeleton (Sprackland, 2000, 2001a), while QPWS obtained a photograph (QPWS, 2001). Prawn hatchery staff relate that the snakes are

commonly seen after dusk near the hatchery. On 20 July 2003 a large specimen was observed when it fell out of a tree while in the process of eating a bat (*Pteropus conspicillatus*).

COLUBRIDAE.

Boiga irregularis (Merrem, 1802). A single adult was observed crossing the access road at 'Near Death Curve' at 2127hr on 26 July. Despite the day having been cool (22°C) and windy (23-28 knots), the evening was calm and the snake slowly crossed the road into the northeastern rainforest. Length was approximately 1.2m and colour deep brown with very faint darker cross-bands. According to staff at the prawn hatchery, this species is common across the island.

Dendrelaphis calligastra (Günther, 1867). A single specimen was collected in 2000 and is now in the Queensland Museum. It is reportedly common around the resort buildings during the day and is frequently encountered when palm trees are trimmed of their coconuts, but they are difficult to observe and our survey did not encounter the snake.

MAMMALS OBSERVED

MACROPODIDAE.

Macropus giganteus Shaw, 1790. A single adult kangaroo was observed and has long been the subject of sporadic reports by visitors and rangers on the island. Our survey found fresh footprints and scat with a 40mm maximum width in 2000 and 2003. A photograph was obtained of the animal on a path to the SE of the ranger base in 2003. The exact taxonomy is unsure and the animal may be a pale *Macropus agilis* (Weston & Krockenberger, pers. comm.). Spoor collected by Weston & Sambono in 2000 were identified as '*Macropus agilis* and *M. gigantens*' by Barbara Triggs (Weston, pers. comm.), but the comment may have been a typographical error ('and' in place of 'or'). We cannot rule out the possibility that both species occur in the heavily forested and largely impenetrable and unexplored central valleys on Fitzroy Island, though only one species was observed.

PTEROPODIDAE.

Pteropus conspicillatus Gould, 1850. Spectacled flying foxes are common on Fitzroy Island, with several roosting locations atop the tallest trees. We have observed the roosts above the water tanks SE of the resort bunkhouses and 50m into the Secret Garden path at the resort's SE. The bats become active around dusk and feed on a variety

of fruits and flowers. This species, first reported from the island by Thomas Henry Huxley in 1845 when he was the assistant surgeon on Capt. Owen Stanley's HMS *Rattlesnake*, regularly flies across the channel to adjacent Cape Grafton.

HIPPOSIDERIDAE.

Hipposideros ater Templeton, 1848. This 40-45mm bat is the most common mammal on Fitzroy Island and is regularly observed at all elevations and in all habitats from shortly before dusk until about midnight. They are most typically encountered near lights, where they strafe footpaths and roads for insect prey. They are fast and remarkably agile fliers that sometimes stray into buildings. We observed one bat fly back and forth in the upper confines of a 1m wide closet for 15 minutes without hitting a wall.

DISCUSSION

Our survey spanned 4 months, during most of which we could only observe and photograph animals in situ. We recorded 17 species of reptiles and 3 mammals, representing 18 genera. Though we surveyed the island at different times of the year, we accept that some taxa may have eluded us due to seasonal or collecting limitations. Certainly the difficulty of the terrain makes likelihood of encountering some potential inhabitants, such as *Antaresia* as well as the confirmed *Saproscincus* and *Boiga*, a problem for surveyors. However, we recorded 4 species from Fitzroy Island for the first time during 2003, including *Glaphyromorphus fuscicandis*, *G. nigracandis* and *Hipposideros ater*.

A short survey conducted 2-8 December 2000 by Nigel Weston & Joe Sambono (2001) included *Egernia freiei*, *Morelia spilota* and *Stegonotus cucullatus* as observed species and they reportedly lodged several lizard taxa with the Queensland Museum (Table 2). From their survey, only *Lepidodactylus lugubris*, *Stegonotus cucullatus* and *Carlia* cf. *rostralis* were not seen by our surveys and it is possible the latter was misidentified (Goodman, pers. comm.).

In October 2001 the Queensland Parks and Wildlife Service conducted a staff workshop on Fitzroy Island and employed a variety of sampling techniques (observation, pitfall and Elliot trapping) to record 72 observations (Freeman, pers. comm.; QPWS, 2001). The collection differs from ours only in recording *Glaphyromorphus cracens* (in error; see Table 1) and *Carlia storri*. Interestingly, none of the five surveys recorded a single frog, though a former

TABLE 1. Reptile and mammal species observed by the VMNH surveys of 1999, 2000 and 2003, exclusive of the birds (for which see Malone, 2001), or for which a voucher specimen exists (*). 1. Initially identified as *G. cracens* in an unpublished QPWS report, but diagnosed and catalogued as *G. crassicaudus* by the Queensland Museum, where the single specimen has been deposited (Patrick Couper, pers. comm.).

Reptilia	*Northern Tree Dtella, <i>Gehyra dubia</i> Asiatic House Gecko, <i>Hemidactylus frenatus</i> *Yellow-headed Ground Gecko, <i>Nactus cheverti</i> Red-sided Skink, <i>Carlia longipes</i> Litoral Skink, <i>Cryptoblepharus litoralis</i> Snake-eyed Tree Skink, <i>Cryptoblepharus virgatus</i> Major Skink, <i>Egernia frerei</i> *Marbled Skink, <i>Eulamprus brachysoma</i> *Short-legged Ground Skink, <i>Glaphyromorphus crassicaudus</i> Bronze Ground Skink, <i>Glaphyromorphus fuscicaudus</i> Red-headed Ground Skink, <i>Glaphyromorphus nigricaudus</i> *Leaf-litter Skink, <i>Carlia laevis</i> Shade Skink, <i>Saproscincus basiliscus</i> Argus Monitor, <i>Varanus panoptes</i> Carpet Python, <i>Morelia spilota</i> Brown Tree Snake, <i>Boiga irregularis</i> *Green Tree Snake, <i>Dendrelaphis calligaster</i>
Mammalia	Gray Kangaroo, <i>Macropus giganteus</i> Dusky Leaf-nosed Bat, <i>Hipposideros ater</i> Spectacled Flying Fox, <i>Pteropus conspicillatus</i>

ranger claims he observed two species of *Litoria* on the island. His notes included *Antaresia maculosa*, '*Morelia kinghorni*', *Liasis mackloti* and the frogs *Litoria caerulea* and *L. infrafrenata*, though we found no evidence for these species and these reports are unconfirmed by photographs or voucher specimens (QPWS, 2001).

The combined surveys sampled island fauna in the months of June, July, August, October (twice) and December. A significant limitation of the sampling already performed is that it represents areas on only about 12-15% of the island's surface. Much of the south and central areas have yet to be explored adequately, if at all. It is still an open question, for example, whether or not a standing pond and surrounding grassland exists in the steep valley about 800m SSE of the ranger base. If present (pond side grasses replace shrubby heath as observed from summit vantage points), the habitat could harbor frogs, additional lizards and perhaps be home to the elusive macropods. Kangaroos were largely removed from the island around 1985-1986 because they were a perceived threat to tourists at the new resort. Spoor, footprints, videotape and a photograph have all been obtained of at least one animal (all but the video by the VMNH survey in

TABLE 2. Herpetological and mammal species reported for Fitzroy Island in unpublished reports or for which only trace evidence (*) was observed by the VMNH surveys. a = Weston & Sambono (2001); b = QPWS unpublished report (2001); c = QPWS anecdotal reports from rangers (pers. comm.), probably in error. 1. Possibly a misidentified *Carlia longipes*.

Mammalia	a. Native Rat, <i>Melomys burtoni</i>
Reptilia	a. Mourning Gecko, <i>Lepidodactylus lugubris</i> a. Skink, <i>Carlia</i> cf. <i>rostralis</i> ¹ a, b. Skink, <i>Carlia storri</i> c. Cogger's Skink, <i>Lampropholis coggeri</i> c. Spotted Python, <i>Antaresia maculosa</i> c. Amethystine Python, <i>Morelia amethystina</i> c. Water Python, <i>Liasis mackloti</i> a, b, c. * Slaty-gray Snake, <i>Neonotus cucullatus</i>
Amphibia	c. White's Tree Frog, <i>Litoria caerulea</i> c. White-lipped Tree Frog, <i>Litoria infrafrenata</i>

2003), though its home area and status as a loner or part of a colony remain unknown.

Though we did not find evidence of *Melomys burtoni*, Weston & Sambono collected a lactating female in heath habitat in 2000 (Weston, pers. comm.).

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LITERATURE CITED

- COGGER, H.G. 1999. Reptiles and amphibians of Australia. (Ralph Curtis Books: Florida).
 COUPER, P., COVACEVICH, J., JANETZKI, H. & MCDONALD, K. 2000. Lizards. In, Wildlife of tropical north Queensland. (Queensland Museum: Brisbane).

- Le CUSSAN, J. 1997. Fitzroy Island National Park; description of vegetation with recommendations for fire management. (QPWS: Brisbane).
- MACLEAY, W. 1878. The lizards of the "Chevert" expedition (part 2). Proceedings of the Linnean Society of New South Wales 2: 97-104.
- MALONE, L. 2001. Checklist of the birds of Fitzroy Island. Zoologica Nova at www.curator.org.
- QUEENSLAND PARKS AND WILDLIFE SERVICE 2001. Herpetological records for Fitzroy Island National Park. (Unpubl.).
- SPRACKLAND, R.G. 2000. The reptiles of Fitzroy Island. Virtual Museum of Natural History Expedition Report 1 at www.curator.org.
- 2001a. Lizards in paradise. Reptiles 9(9): 11-16.
- 2001b. Reptiles of Fitzroy Island. Reptilia 15: 56-60.
- 2001c. The reptiles of Fitzroy Island. Virtual Museum of Natural History Expedition Report 2 at www.curator.org.
- SWAN, G. 1995. A photographic guide to snakes and other reptiles of Australia. (Ralph Curtis Books: Florida).
- WESTON, N. & SAMBONO, J. 2001. Fitzroy sampling notes. (QPWS: Brisbane) (Unpubl.).
- ZUG, G. 1997. Australian populations of the *Nactus pelagicus* complex (Reptilia: Gekkonidae). Memoirs of the Queensland Museum 42(2): 613-626.